

## X-RAY DETECTORS SELECTION LISTS

1. Select energy range \_\_\_\_\_ eV to \_\_\_\_\_ keV

Options: SDD Peltier-cooled 100eV to 30keV  
Si(Li) LN<sub>2</sub>-cooled 100eV to 60keV  
IGX LN<sub>2</sub>-cooled 200eV to 100keV

2. Select active area \_\_\_\_\_ mm<sup>2</sup>

Options: 10mm<sup>2</sup> (small detector) to 100mm<sup>2</sup> (large detector)

3. Select energy resolution \_\_\_\_\_ FWHM at \_\_\_\_\_

Options: 115eV to 155eV FWHM at 5.9keV (<sup>55</sup>Fe source)

4. Select endcap length \_\_\_\_\_ inch

5. Select orientation style \_\_\_\_\_

Options: Horizontal side-looker (most common configuration)  
Vertical dipstick

6. Select window style \_\_\_\_\_

Options: Beryllium (standard down to 1keV)  
Ultra-thin polymer (down to 180eV)  
Windowless (requires special vacuum isolation)

7. Select special options \_\_\_\_\_

Examples: High count rates  
Multiple detector arrays

8. Select purchase priority \_\_\_\_\_

Options: Budgetary  
Long-term (>1 year)  
Short-term (<1 year)  
Immediate (<3 months)